

AL 600V XLPE Insulation RHH/RHW-2/USE-2. CT Rated - Sunlight Resistant - Silicone Free

Power Cable 600Volt Single Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation RHH/RHW-2/USE-2. CT Rated 1/0 and Larger - Sunlight Resistant - For Direct Burial - Silicone Free



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 USE-2

APPLICATIONS AND FEATURES:

Southwire’s 600 Volt power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. CT Rated 1/0 and Larger - Sunlight Resistant - For Direct Burial - Silicone Free

SPECIFICATIONS:

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- Buy American: Compliant with Buy American Requirements, found in 49 U.S.C. § 5323(j); specify “Made in the USA Only!” when ordering to ensure your project receives American made products.
- VW-1 (Vertical-Wire) Flame Test

SAMPLE PRINT LEGEND:

SOUTHWIRE EXXXXX #P# (UL) [#AWG Or #kcmil] AL RHH/RHW-2 USE-2 XLPE 600V For CT USE SUN. RES. For DIRECT BURIAL FT4 VW-1YEAR (NESC) [SEQUENTIAL FEET MARKS]

Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Cond. Number | Strand Count   | Diameter Over Conductor | Insul. Thickness | Approx. OD | Aluminum Weight | Approx. Weight |
|--------------|------------|--------------|----------------|-------------------------|------------------|------------|-----------------|----------------|
|              | AWG/Kcmil  |              | No. of Strands | inch                    | mil              | inch       | lb/1000ft       | lb/1000ft      |
| 576142       | 1/0        | 1            | 10             | 0.336                   | 80               | 0.504      | 99              | 165            |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item  
\* Strand count meets minimum number per ASTM

Table 2 – Electrical and Engineering Data

| Stock Number | Cond. Size | Cond. Number | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity At 60°C | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|--------------|------------|--------------|--------------------|------------------|----------------------|----------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|              | AWG/Kcmil  |              | inch               | lb               | Ω/1000ft             | Ω/1000ft             | Ω/1000ft                   | Amp                        | Amp                        | Amp                        |
| 576142       | 1/0        | 1            | 2.0                | 633              | 0.168                | 0.201                | 0.044                      | 100                        | 120                        | 135                        |

\* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.  
\* Inductive Reactance is based on non-ferrous conduit with one diameter spacing.